Glenn Research Center, Environmental Programs Manual

Chapter 24 - CHEMICAL HYGIENE POLICY

NOTE: The current version of this Chapter is maintained and approved by the Environmental Management Office (EMO). The revision date for this chapter is August 2001. If you are referencing paper copies, please verify that it is the most current version before use. The current version is maintained on the Glenn Research Center intranet at http://osat-ext.grc.nasa.gov/emo/pub/epm/epm-contents.pdf. Approved by: EMO Chief, Michael Blotzer {mailto: Michael.J.Blotzer@grc.nasa.gov}

GENERAL

This chapter establishes Glenn policy and assigns responsibilities for the laboratory scale use and handling of hazardous chemicals. All NASA Glenn Research Center (GRC), Plum Brook Station (PBS) and resident support services contractor employees involved in the laboratory scale use of hazardous chemicals are to be informed that their lives or health may depend on their knowledge of the chemicals they use or work with, on their following proper handling procedures, use of engineering controls, and on wearing appropriate protective apparel and equipment.

AUTHORITIES

OSHA 29 Code of Federal Regulations 1910.1450, Occupational Exposures to Hazardous Chemicals in Laboratories, as revised

Executive Order 12196, Occupational Safety and Health Provisions for Federal Employees

BACKGROUND

On January 31, 1990, the Occupational Safety and Health Administration (OSHA) issued the final rule 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemicals in Laboratories. This chapter prescribes the Center's policy with regard to that directive.

SCOPE

This chapter applies to all NASA Glenn Research Center civil servant, tenant and resident support services contractor personnel engaged in the laboratory use of hazardous chemicals. A Chemical Hygiene Plan has been established as part of this policy to assure Center compliance with the Occupational Safety and Health Administration Regulation 29 (CFR 1910.1450), Occupational Exposure to chemicals in Laboratories. The Environmental Management Office (EMO) administers the Chemical Hygiene Plan. Implementation of the plan is the responsibility of each laboratory line manager/supervisor.

POLICY

It is the policy of the NASA Glenn Research Center to protect the lives and health of employees who work with hazardous chemicals in laboratories by providing adequate laboratory facilities, equipment, training, personal protection, and environmental surveillance of their workplace.

RESPONSIBILITIES

Center Director

Has ultimate responsibility for chemical hygiene within Glenn and must, with other administrators, provide continuing support for institutional chemical hygiene.

Chief, Environmental Management Office

- Appoints a technically qualified management official as the Chemical Hygiene Officer to carry out the responsibilities set forth in the Chemical Hygiene Plan.
- Assures the availability of resources and technical support necessary for establishing, executing, reviewing and maintaining of the Chemical Hygiene Plan in compliance with OSHA 29 CFR 1910.1450.

Chemical Hygiene Officer

Establishes, administers, and maintains the Chemical Hygiene Plan in coordination with all appropriate Glenn Research Center personnel (such as Glenn Safety Office).

Laboratory Line Managers/Supervisors of Employees Who Work with Laboratory Scale Amounts of Hazardous Chemicals

- Responsible for ensuring that the chemical hygiene plan is implemented
- Ensures that workers know and follow the chemical hygiene rules, that protective equipment is available and in working order, and that appropriate training has been provided
- Provides regular, formal chemical hygiene and housekeeping inspections, including routine inspections of emergency equipment
- Knows the current legal requirements concerning regulated substances
- Determines the required protective apparel and equipment
- Ensures that facilities and training for use of any material being ordered are adequate.

Laboratory Workers

- Responsible for following the requirements in the chemical hygiene plan
- Responsible for developing standard operating procedures, under the technical guidance of the Chemical Management Team, for laboratory processes.
- Responsible for identification of chemical hazards, use of engineering controls and personal protective equipment when required, and ensuring proper disposal of chemicals when no longer required.

Chemical Management Team

- Responsible for providing technical guidance on implementation of the chemical hygiene plan
- Provides for chemical specific training to laboratory workers, when requested by the line supervisor
- Provides technical guidance to laboratory workers on developing standard operating procedures and proper storage and handling of hazardous chemicals

Glenn Safety Office, in Conjunction with the Chemical Hygiene Officer

Ensures that appropriate warning placards and signs are provided or arranged for and in place at designated laboratory areas as necessary.

Training Officer, in Conjunction with the Chemical Hygiene Officer

- Determines the types and levels of training requirements and provides appropriate programs for training all Glenn, tenant, and resident support services contractor employees involved in the laboratory use of hazardous chemical at the Glenn, the Plum Brook Station, or an off site facility
- Establishes and maintains the official training records and periodically provides the Chemical Hygiene Officer with an updated listing of all trained employees, the type and date of training, and the sponsor.

Medical Officer, in Conjunction with the Industrial Hygiene Team

- Provides information on medical testing available to the laboratory worker
- Performs selected employee testing and monitoring as required
- Maintains records as required.

Plum Brook Management Office, in Conjunction with the Chemical Hygiene Officer

Ensures compliance with the OSHA Laboratory Standard at the laboratories at the Plum Brook Station.

REQUIREMENTS

All aspects of the Glenn Chemical Hygiene Plan assure compliance with OSHA 29 Code of Federal Regulations 1910.1450. Its scope, as it applies to laboratory use, includes, but is not limited to

- Basic rules and procedures
- Chemical procurement, distribution and storage
- Environmental monitoring
- Housekeeping, maintenance, and inspections
- Medical programs
- Personal protective apparel and equipment
- Records
- Signs and labels
- Spills and accidents
- Information and training
- Waste disposal
- Laboratory design
- Standard laboratory operating procedures.

RECORDS

- NASA Chemical Hygiene Plan
- Copies of standard operating procedures
- Training records of laboratory workers receiving Chemical Hygiene Training

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Office of Safety and Assurance Technologies (OSAT)
Environmental Management Office Chief: Michael Blotzer {mailto:Michael.J.Blotzer@grc.nasa.gov}
Author and/or Assigned To: Toni Mayor {mailto:Antoinette.Mayor@grc.nasa.gov}
Web Curator: Sandra Jacobson, InDyne Inc. {mailto:Sandra.Jacobson@grc.nasa.gov}
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